

Dragon Runner Unmanned Vehicle

Purpose: To improve a small unit's situational awareness and force protection by extending their limit observation through the use of mobile ground sensors.

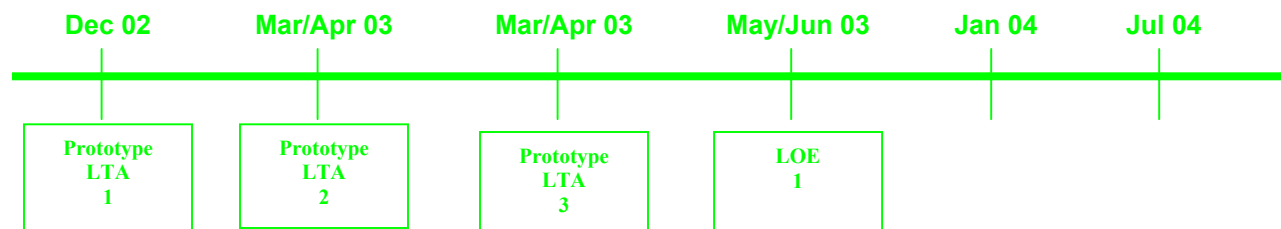
Background: Small units have always relied on their own eyes and ears for tactical reconnaissance surveillance and target acquisition (RSTA) and force protection. In today's battlefields, small unit leaders are increasingly called upon to enter urban or similar complex hostile environments. In such environments, tactical units need a small, low-risk, organic capability to rapidly conduct RSTA and small unit force protection. Such a capability will significantly mitigate the high risk to personnel operating in asymmetric environments. The Dragon Runner will be deployed at the small unit level within the ground combat element. It will increase the employing unit's RSTA capability to observe tactical objectives and danger areas beyond the unit's line of sight. Dragon Runner will accomplish this by providing real-time, "around the corner", imagery directly to operational elements at the small unit level given the tactical situation. Dragon Runner also provides a man-portable limited tactical force protection capability while in "Sentry Mode" by increasing the real-time feedback to the small unit leader.



Description: Initial prototype systems are comprised of three components: Vehicle, Operator Control Unit (OCU) and User Interface. Vehicle size: 15.5" L x 11.25" W x 5" H. System weight: 13 lbs goal (9 lbs vehicle, 4 lbs OCU / User Interface). Each vehicle features a sensor suite, an infrared LED for night use, and a non-active suspension as Dragon Runner will be tossable (through windows, up stairs, over walls, etc.) The OCU is sized to fit within the standard MOLLE SAW ammo pouch and the attached user interface is the size of a standard 5590 battery and features a 4" video display and home-gaming type controller for vehicle control. The entire system fits within the standard MOLLE Patrol Pack and uses 5590 type batteries for power supply.

Deliverable Product(s): Prototypes and assessment based on operational experimentation.

Milestones:



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